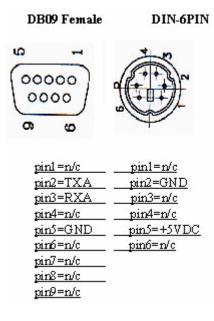
# San Jose Technology, Inc.

## **Mini GPS Locator**

Model: GU-168







DB-9 interface with RS-232 protocol



**USB** interface

#### **Overview:**

The main goal of GU-168 is to be used as a part of integrated system, which can be a simple PVT (Position-Velocity-Time) system, for instance, G-mouse, PND (Personal Navigation Device), or complex wireless systems, such as a system with GSM function, a system with Bluetooth function, and a system with GPRS function. The GU-168 can be the best candidate for users' systems as the users' systems need the careful consideration on the performance, sensitivity, power consumption, and/or size. In the specification of GU-168 at the next page, it is noticeable that in addition to excellent start-up times and position accuracy, the updated rate can be up to 10 Hz and the sensitivity of -1643dBm.

#### **Features:**

- Active antenna on board helps the system integrators to do the design-in easily.
- High sensitive GPS Locator and GPS antenna.
- The perfect match is most suitable for any mobile devices, such as PND, GPS PDA, personal tracker and any portable devices, which need GPS features.



### **Specifications:**

PHYSICAL CONSTRUCTIO	N			
Dimension	L58.5mm*W48mm*H15mm			
Weight	214 gram(with cable)			
Receiving frequency	1575.42MHZ & 1602MHZ			
Enclosure	Highly impact; corrosion-proof			
Mounting	Magnetic mount			
Construction	Full EMI shielding			
ENVIRONMENTAL CONDITIO	INS			
Temperature	Operating: $-30 \sim +80 ^{\circ}\mathbb{C}$ Storage: $-35 \sim +85 ^{\circ}\mathbb{C}$			
COMMUNICATION	Storage: 35 4 103 C			
Protocol	NMEA, UBX binary			
Interface	RS-232, TTL			
INTERFACE CAPABILITY	113 232, 112			
Standard Output Sentences	GGA, RMC, GSV, GSA, VTG, GLL Optional: ZDA			
PERFORMANCE				
Built-in Antenna	Highly-reliable ceramic patch			
	Tracking &	GPS & GLONASS GPS		GPS
Sensitivity	Navigation	-164 dBm -		-163 dBm
SBAS	WAAS, EGNOS, MSAS			
Receiver architecture	72 parallel channels			
Start-up time		GPS & GLONASS GPS 3 s 3 s		
				2 -
	hot start	3 s		3 8
	hot start cold start	3 s 41 s		41 s
	110000000			
	cold start	41 s		41 s
Position accuracy*	cold start	41 s 4 s	SBAS: 2.0	41 s 3 s
Position accuracy* Velocity	cold start Aided start	41 s 4 s	SBAS: 2.0	41 s 3 s
	cold start Aided start Without aid: 2.5 C	41 s 4 s EP	SBAS: 2.0	41 s 3 s
Velocity	cold start Aided start  Without aid: 2.5 C  500 m/s	41 s 4 s EP m) o 5 Hz w		41 s 3 s
Velocity Altitude	cold start Aided start  Without aid: 2.5 C 500 m/s  50,000m (Maximus 1 Hz(default), up t	41 s 4 s EP m) o 5 Hz w		41 s 3 s
Velocity Altitude Update Rate	cold start Aided start  Without aid: 2.5 C 500 m/s  50,000m (Maximus 1 Hz(default), up t up to 10 Hz with G	41 s 4 s EP m) o 5 Hz w	ith GPS & G	41 s 3 s
Velocity Altitude Update Rate Power Supply	cold start Aided start  Without aid: 2.5 C 500 m/s  50,000m (Maximum 1 Hz(default), up t up to 10 Hz with G 5V , 8-24V	41 s 4 s EP m) o 5 Hz w PS	ith GPS & 0	41 s 3 s m
Velocity Altitude Update Rate Power Supply Power Consumption	cold start Aided start  Without aid: 2.5 C 500 m/s  50,000m (Maximum 1 Hz(default), up t up to 10 Hz with G 5V , 8-24V  Acquisition: 90mA, 9600 bps (default)	41 s 4 s EP m) o 5 Hz w PS	ith GPS & 0	41 s 3 s m